



Express Mail No. EV784674564US

Attorney Docket No. 337348046US

(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Firlik et al.

Application No.: 10/606,202

Confirmation No.: 4373

Filed: June 24, 2003

Art Unit: 3762

For: METHODS AND APPARATUS FOR  
EFFECTUATING A LASTING CHANGE IN  
A NEURAL-FUNCTION OF A PATIENT

Examiner: R. D. Bradford

**INFORMATION DISCLOSURE STATEMENT (IDS)**

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed more than three months after the U.S. filing date, OR more than three months after the date of entry of the national stage of a PCT application, AND after the mailing date of the first Office Action on the merits, whichever occurs first, but before the mailing date of a Final Office Action or Notice of Allowance (37 CFR 1.97(c)).

Applicant has not submitted copies of each cited U.S. patent and U.S. patent application as required by 37 CFR 1.98(a)(2)(i), amended October 2004, as the U.S.

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Patent and Trademark Office has waived this requirement for all U.S. patent applications. Applicant submits herewith copies of foreign and non-patents in accordance with 37 CFR 1.98(a)(2).

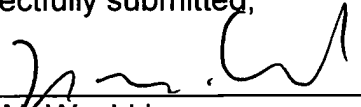
In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

Our check in the amount of \$180.00 covering the fee set forth in 37 CFR 1.17(p) is enclosed. The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 50-0665, under Order No. 337348046US.

Dated: Jan. 25, 2006

Respectfully submitted,

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PTO/SB/08a/b (07-05)

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Substitute for form 1449A/B/PTO				<b>Complete if Known</b>	
				Application Number	10/606,202-Conf. #4373
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				Filing Date	June 24, 2003
				First Named Inventor	Andrew D. Firlik
				Art Unit	3762
				Examiner Name	R. D. Bradford
				Attorney Docket Number	337348046US
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U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US-2003-0125786-A1	07-03-2003	Gliner et al.	
		US-2003-0130706-A1	07-10-2003	Sheffield et al.	
		US-2004/0092809-A1	05-13-2004	Decharms	
		US-2004/0243205-A1	12-02-2004	Keravel et al.	
		US-2005/0154425-A1	07-14-2005	Boveja et al.	
		US-2005/0154426-A1	07-14-2005	Boveja et al.	
		US-4,590,946	05-27-1986	Loeb	
		US-5,024,226	06-18-1991	Tan	
		US-5,282,468	02-01-1994	Klepinski	
		US-5,520,190	05-28-1996	Benedict et al.	
		US-5,601,611	02-11-1997	Fayram et al.	
		US-6,198,958	03-06-2001	Ives et al.	
		US-6,280,462	08-28-2001	Hauser et al.	
		US-6,301,493	10-09-2001	Marro et al.	
		US-6,464,356	10-15-2002	Sabel	
		US-6,484,059	11-19-2002	Gielen	
		US-6,615,065	09-02-2003	Barrett et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \* CITE NO.: Those application(s) which are marked with an single asterisk (\*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	
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NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>	
		Brain Electrical Stimulation to Enhance Recovery After Stroke. ClinicalTrials.gov. [Retrieved on 12-22-2005]. Retrieved from the internet <URL <a href="http://www.clinicaltrials.gov/ct/show/NCT00085657?order=2">http://www.clinicaltrials.gov/ct/show/NCT00085657?order=2</a> >		
		BURNETT, Mark G. et al., "Diffuse optical measurement of blood flow, blood oxygenation, and metabolism in a human brain during sensorimotor cortex activation," Optics Letters, Vol. 29, No. 15, pp: 1766-1768 (August 1, 2004)		
		DE RIDDER, Dirk et al., "Magnetic and electrical stimulation of the auditory cortex for intractable tinnitus," Journal Neurosurg., Vol. 100, pp: 560-564, (March 2004)		
		HAYAKAWA, Toshiji et al., "Changes in Cerebral Oxygenation and Hemodynamics During Obstructive Sleep Apneas," Chest, Vol. 109, pp: 916-921 (1996)		
		HOSHI, Yoko et al., "Detection of dynamic changes in cerebral oxygenation coupled to neuronal function during mental work in a man," Neuroscience Letters, Vol. 150, pp: 5-8 (1993)		
		HOSHINO et al., "Application of multichannel near-infrared spectroscopic topography to physiological monitoring of the cortex during cortical mapping: technical case report," Surgical Neurology, Vol. 64, pp. 272-275 (2005)		
		L-DOPA dyskinesias. BioChemistry of PD. [Retrieved on 12-22-2005]. Retrieved from the internet <URL <a href="http://www.mayo.edu/fdp/pd-info/dyskinesias.htm">http://www.mayo.edu/fdp/pd-info/dyskinesias.htm</a> >>		
		MARTIN et al, "Transcranial Magnetic Stimulation as a Complementary Treatment for Aphasia," Semin Speech Language, Vol. 25, pp: 181-191 (2004) Abstract Only- 1 page		
		PANCHANATHAN, Sethuraman et al., "Rehabilitation of patients with hemispatial neglect using visual-haptic feedback in Virtual reality environment," [Retrieved on 12-22-2005]. Retrieved from the internet <URL <a href="http://www.public.asu.edu/~tmcdani/publications.htm">http://www.public.asu.edu/~tmcdani/publications.htm</a> >>		
		PENN, Michael, "Stemming Parkinson's," On Wisconsin Alumni Magazine, Summer 2003, [Retrieved on 12/22/2005]. Retrieved from the internet <URL <a href="http://www.uwalumni.com/onwisconsin/2003_summer/research.html">http://www.uwalumni.com/onwisconsin/2003_summer/research.html</a> >		
		STRANGMAN, Gary et al., "A Quantitative Comparison of Simultaneous BOLD fMRI and NIRS Recordings during Functional Brain Activation," NeuroImage, Vol. 17, pp: 719-731 (2002)		
		STRANGMAN, Gary et al., "Factors affecting the accuracy of near-infrared spectroscopy concentration calculations for focal changes in oxygenation parameters," NeuroImage, Vol. 18, pp: 865-879 (2003)		
		STRANGMAN, Gary et al., "Non-Invasive Neuroimaging Using Near-Infrared Light," Biological Psychiatry, Vol. 52, pp: 679-693 (2002)		
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Sheet	3	of	3	Attorney Docket Number	337348046US

		TAGA, Gentaro et al., "Brain imaging in awake infants by near-infrared optical topography," PNAS, Vol. 100, No. 19, pp:10722-10727 (September 16, 2003)	
		The INVOS Cerebral Oximeter. Somanetics, 1 page [Retrieved on 12-22-2005]. Retrieved from the internet <URL < <a href="http://www.somanetics.net/invos.htm">http://www.somanetics.net/invos.htm</a> >>	
		THEORET, Hugo et al., "Exploring Paradoxical Functional Facilitation with TMS," Supplements to Clinical Neurophysiology, Vol. 56, pp: 211-219 (2003)	
		THOMAS, Carmen et al., "Do Children with aggressive behavior have temporal lobe changes?" Alasbimn Journal, Year 5, No. 19, 8 pages (January 2003)	
		TORONOV, Vlad et al., "Near-infrared study of fluctuations in cerebral hemodynamics during rest and motor stimulation: Temporal analysis and spatial mapping," Medical Physics, Vol. 27, No. 4, pp: 801-815 (April 2000)	
		WEINAND, Martin E. et al., "Cerebral blood flow and temporal lobe epileptogenicity," [Retrieved on December 22, 2005]. Retrieved from the internet: <URL <a href="http://www.aans.org/education/journal/neurosurgical/nov96/1-5-3.asp">http://www.aans.org/education/journal/neurosurgical/nov96/1-5-3.asp</a> >	

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